

Comparisons of Job Characteristics

Focus Occupation: [Architectural and Engineering Managers \(11-9041\)](#)

Associated Occupation: [Environmental Engineering Technicians \(17-3025\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 76

Focus Occupation: Architectural and Engineering Managers (11-9041)
Associated Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	15.8	23.2	>>	Current knowledge level is likely more than sufficient
Design	5.2	11.1	19.0	>>	Current knowledge level is likely more than sufficient
Building and Construction	4.0	10.6	10.7	0	Current knowledge level may be sufficient
Physics	4.3	10.2	13.0	>	Current knowledge level is likely sufficient
Law and Government	5.9	9.5	8.6	<	Expanded education and/or training may be required
Biology	3.7	6.8	1.9	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 63

Focus Occupation: Architectural and Engineering Managers (11-9041)
Associated Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Reading Comprehension	10.7	16.3	14.8	<	A higher skill level may be required
Critical Thinking	10.8	14.5	12.8	<	A higher skill level may be required
Active Learning	8.7	12.6	10.8	<	A higher skill level may be required
Mathematics	6.2	11.3	11.7	0	Current skill level may be sufficient
Quality Control Analysis	5.9	9.7	7.0	<<	Extensive development of skills in this area may be required
Management of Material Resources	3.7	6.8	9.2	>>	Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 91			
Focus Occupation: Architectural and Engineering Managers (11-9041) Associated Occupation: Environmental Engineering Technicians (17-3025)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	16.6	15.2	0	Current ability level may be sufficient
Problem Sensitivity	11.1	15.9	13.9	<	Some improvement in abilities may be required
Near Vision	11.1	14.7	12.5	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	14.5	13.9	0	Current ability level may be sufficient
Inductive Reasoning	10.2	13.6	12.5	0	Current ability level may be sufficient
Information Ordering	9.9	13.3	12.0	<	Some improvement in abilities may be required
Category Flexibility	9.0	11.8	11.4	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	10.6	13.3	>	Current ability level is likely sufficient
Number Facility	6.3	10.6	11.2	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 74
Focus Occupation: Architectural and Engineering Managers (11-9041) Associated Occupation: Environmental Engineering Technicians (17-3025)		
Work Activities	Exclusivity of Activity	
Communicate technical information	4	
Estimate cost for engineering projects	69	
Evaluate engineering data	60	
Prepare technical reports or related documentation	22	
Read blueprints	10	
Read schematics	34	
Read technical drawings	7	
Understand engineering data or reports	48	
Understand technical operating, service or repair manuals	6	
Use pollution control techniques	62	
Use scientific research methodology	21	
Use technical regulations for engineering problems	61	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 85

Focus Occupation: Architectural and Engineering Managers (11-9041)
Associated Occupation: Environmental Engineering Technicians (17-3025)

Tools and Technologies	Exclusivity
Autoclave and sterilizer equipment and accessories	12
Business function specific software	1
Chromatographic measuring instruments and accessories	16
Computer data input devices	2
Computers	1
Content authoring and editing software	1
Content management software	6
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Fermentation equipment	31
General laboratory glassware and plasticware and supplies	13
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Laboratory decanting and distilling and evaporating and extracting equipment and supplies	19
Laboratory electrophoresis and blotting system and supplies	26
Laboratory enclosures and accessories	17
Laboratory heating and drying equipment	13
Laboratory incubating equipment	20
Network applications software	1
Safety apparel	4
Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.